

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Javit A. Drake et al.	Art Unit :	1745
Serial No. :	10/664,405	Examiner :	Hodge, Robert W.
Filed :	September 16, 2003	Conf. No. :	3194
Title :	ENHANCED FUEL DELIVERY FOR DIRECT METHANOL FUEL CELLS		

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

Responsive to the action mailed June 17, 2008, applicant elects **Species 2**. The election is made with traverse.

Election/Restrictions

The examiner considers the application including claims directed to the following patentably distinct species:

**Species 1 - a fuel cartridge comprising a housing, a fuel egress port and a heating element disposed in thermal communication with an interior portion of the housing**

**Species 2 - a fuel cartridge comprising a housing, a fuel egress port, a fuel storage bladder and a piston urged against the bladder**

**Species 3 - a fuel cartridge comprising a housing, a fuel egress port, with a piston urged against a vaporization membrane**

**Species 4 - a fuel cartridge comprising an inner housing with an opening that has a vaporization membrane disposed across the opening, a piston urged against the vaporization membrane and an outer housing disposed around at least a portion of the inner housing**

The examiner also required a sub-species election if applicants elected species 1, of the subspecies:

**Subspecies 1a - one species for the surface area enhanced planar vaporization membrane selected from: a composite membrane comprised of multiple layers or folds of a polymer membrane, a membrane arranged as a series of folds or a polymer membrane provided with macroscopically irregular and/or microscopically roughened membrane surfaces**

**Subspecies 2a - one subspecies for the heating element selected from: a wire disposed in thermal communication with the interior of the cartridge, disposed in the interior of the cartridge or in the**

**CERTIFICATE OF MAILING BY EFS-WEB FILING**

I hereby certify that this paper was filed with the Patent and Trademark Office using the EFS-WEB system on this date: July 29, 2008

**interior of the cartridge and spaces a vapor portion of the cartridge from a liquid reservoir or the cartridge**

The examiner takes the position that: "The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species." The examiner moreover acknowledges that: "In addition, these species are not obvious variants of each other based on the current record."

Because Applicant has elected to present claims of differing scope that the examiner contends are directed to non-obvious variants of each other, Applicant contends that discovery of prior art to one of the variants should not result in an obviousness rejection to other variants because the examiner has already found these to be non-obvious in view of each other.

Applicant contends that presently at least claims 12-19 read on the elected species.

The examiner argues that:

**There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.**

Applicant contends that this restriction is improper at least because the examiner is mistaken that species have "mutually exclusive characteristics." Indeed, as described and claimed by Applicant these exclusive characteristics are taught as usable together. Therefore they should not be view as exclusive but rather as presenting claims of varying scope. The examiner alleges that: "The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries)," but the examiner has not offered any evidence of this allegation. Moreover, the examiner has yet to classify any of the claimed inventions and therefore Applicant is unable to determine whether this contention has any merit. Applicant is unable to ascertain why "the species are likely to raise different non-prior art issues", because the examiner offers no reasoning why that should be.

Consonant with the examiner's previous findings, Applicant contends that if the examiner believes "the prior art applicable to one species would not likely be applicable to another species," to be true, then

the examiner cannot apply reasoning that discovery of prior art to one of the variants leads to an obviousness rejection to other variants, because to do so would contradict the examiner's admitted findings that the species are non-obvious in view of each other.

Please charge the Petition for Extension of Time fee and please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: July 29, 2008

/Denis G. Maloney/  
Denis G. Maloney  
Reg. No. 29,670

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (877) 769-7945